

**IN THE CLAIMS:**

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Although no claims are currently amended, the full text of the claims is presented below for the convenience of the Examiner.

1. (previously presented) A method for instruction processing executing on a computer, comprising:
  - identifying a classification of a functional unit which can execute a basic instruction;
  - determining whether said basic instruction can be assigned to a logical instruction slot through checking a relationship between said classification of said functional unit and said logical instruction slot; and
  - assigning, to an instruction slot, said basic instruction determined to be assignable to said logical instruction slot.
2. (previously presented) The method for instruction processing as claimed in claim 1, wherein said identifying is divided into identifying an instruction category of a basic instruction, and identifying a classification of a functional unit which can execute said instruction category.
3. (previously presented) The method for instruction processing as claimed in claim 1, further comprising prior to said assigning, checking a relationship between said basic instruction that can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.
4. (previously presented) The method for instruction processing as claimed in claim 2, further comprising, prior to said assigning, for checking a relationship between said basic instruction that can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.
5. (previously presented) The method for instruction processing as claimed in claim

3, wherein said determining includes a step of identifying said logical instruction slot having a lowest numeral determined to be assignable.

6. (previously presented) The method for instruction processing as claimed in claim 4, wherein said assigning includes identifying said logical instruction slot having a lowest numeral determined to be assignable.

7. (previously presented) The method for instruction processing as claimed in claim 3, wherein said identifying, determining, checking and assigning are repeated for all instruction slots.

8. (previously presented) The method for instruction processing as claimed in claim 4, wherein said identifying, determining, checking and assigning are repeated for all instruction slots.

9. (previously presented) A computer program executing on a computer and stored on a computer readable medium, comprising:

identifying a classification of a functional unit which can execute a basic instruction;  
determining whether said basic instruction can be assigned to a logical instruction slot through checking a relationship between said classification of said functional unit and said logical instruction slot: and

assigning, to an instruction slot, said basic instruction determined to be assignable to said logical instruction slot.

10. (previously presented) A computer program as claimed in claim 9, wherein said identifying is divided into identifying an instruction category of a basic instruction, and identifying a classification of a functional unit which can execute said instruction category.

11. (previously presented) The computer program as claimed in claim 9, further comprising , prior to said assigning, for checking a relationship between said basic instruction than can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.

12. (previously presented) The computer program as claimed in claim 10, further

comprising, prior to said assigning , for checking a relationship between said basic instruction that can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.

(previously presented) A method for aiding instruction processing, comprising:  
arranging, via computer, variable-length instructions to be executed in an order in a logical instruction slot; and  
verifying an arrangement of the variable-length instructions.